

Ref: OU# 06-052

Phoenix – Goodyear Airport Area/Western Avenue Plume Community Advisory Group Meeting

Thursday, October 6, 2005
6:30p.m. to 8:30p.m.
Goodyear City Hall, Room 230
190 N. Litchfield Road
Goodyear, Arizona

FINAL MINUTES

CAG members present: Thomas H. Jones, Jr.; David Day; Dr. Fred Scott

Members absent: Diane Krone; Sheri Michele Lauritano; Keith Longley; Susan Kagan; Bob Smith

ADEQ Staff in attendance: Lou Sandoval, Project Manager; Veronica Garcia, Outreach Unit Manager

EPA Staff in attendance: Mary Aycock, Remedial Project Manager; Viola Cooper, Community Involvement Coordinator

Members of the public present: Kevin Murdock, CH2MHILL; Robert A. Mongrain, ARCADIS; David Iwanski, City of Goodyear; Jeffery A. Sussman, The Goodyear Tire & Rubber Company; Ron R. Clark, The Goodyear Tire & Rubber Company; Darryl Henning, The West Valley View; Barney Helmick, Phoenix Goodyear Airport; Cynthia Parker, City of Phoenix – Aviation Department. Approximately 15 additional members of the public were present but there is no record of their attendance.

The following matters were presented at the meeting:

1. Call to Order / Introduction of CAG Applicants

Veronica Garcia, ADEQ Community Outreach Supervisor, welcomed everyone and introduced Mr. Thomas Jones, CAG Co-Chair, who facilitated the rest of the meeting. CAG members and all meeting attendees introduced themselves.

2. Acceptance and/or Changes to Minutes for 9/08/05 CAG Meeting

A quorum was not present at the meeting. Discussion on this agenda item was postponed until the next meeting.

3. PGA-South Site Update – Goodyear Tire and Rubber Company

Ms. Jeff Sussman stated that Ron Clark will be replacing him as project manager. The update on progress for site clean-up and remediation of ground water included: site history and contaminants; water bearing units/aquifers; map of current footprint of plume contaminant concentrations for sub-units A, B, and C. Since 1990, Goodyear Tire and Rubber Company has removed ~73% to 83% of TCE in plumes and has reduced the plume footprint and concentration of contaminants. Mr. Sussman attributed the progress made on the cleanup of the site on the high level of cooperation between City of Goodyear, US EPA, Goodyear Tire and Rubber Company, and ADEQ.

4. PGA-South 5-year Review Discussion

Mary Aycock announced that EPA had completed its five-year review for the Phoenix Goodyear Airport Area (South) Superfund Site. EPA produced a fact sheet describing the site background, the five-year review process, the review findings, conclusions and recommendations, and contact information. The results of the five-year review were the following: the contaminant concentrations in groundwater have been reduced, and treated groundwater from the treatment systems has met cleanup goals throughout the period of operation. Groundwater still contains levels above specified cleanup goals. The primary issues relating to the effectiveness of the remedy include: 1) the removal of trichloroethene (TCE) from Subunit A groundwater has not been optimized due to the presence of chromium, and 2) some additional sampling of groundwater for metals may be required to confirm effectiveness of remedial actions.

Other issues identified during the five-year review process relate to the possible presence of trace metals in soil and groundwater, and maintenance of treatment systems. Newly identified issues which were not previously addressed include the possibility of intrusion of vapor containing volatile organic compounds (VOCs) into industrial buildings at the site, a lack of comprehensive institutional controls, limited information on risk to ecological receptors, and encroaching contaminants such as VOCs from the Western Avenue WQARF site. EPA made recommendations related to these issues which are to be addressed during the remainder of 2005 and into 2006.

Dr. Fred Scott asked if it was fair to ask Goodyear Tire and Rubber Company to look for heavy metal contamination when they had been asked to concentrate the extraction process on TCE. With the clean up project being so close to completion, why ask Goodyear Tire and Rubber Company to do it now. Jeff Sussman responded that they have an obligation to validate heavy metal sampling data from four to five years ago. Ms. Aycock added that the additional sampling will address the issue of the possible presence of trace metals in soil and groundwater. Mr. Dave Iwanski, City of Goodyear Water Resources Manager, offered to share sampling data results (including heavy metals) from adjacent wells. Ms. Aycock stated that EPA is interested in receiving the data from City of Goodyear.

5. PGA-North Field Work Update

Mr. Mongrain introduced himself and explained that ARCADIS is a contractor for Crane Company. Mr. Mongrain gave CAG members a tour of PGA North earlier in the day. Mr. Mongrain's presentation included a map of the site showing the extent of the groundwater contamination. He explained that groundwater that is contaminated with TCE and perchlorate, from the aquifers in Subunit A and Subunit C, continues to be extracted and treated. He also stated that groundwater monitoring indicates little change in the plume shape or contaminant concentrations since the last meeting.

In 2005, the main treatment system has treated 69 million gallons of water and has removed 435 pounds of TCE. Previously, after TCE was removed, treated water containing perchlorate would go to the City of Goodyear Wastewater Treatment System. The installation of an ion exchange unit in April has allowed Crane Co. to re-inject water into subunit A, which was the original remedy. The perchlorate concentration in the effluent is less than 2 ppb.

The well 33A treatment system has treated 168 million gallons of water and has removed 173 pounds of TCE. There is a lower concentration of TCE in this area but greater groundwater flow.

Crane Co. is conducting a number of investigations. Several supply and old irrigation wells have been identified as potential conduits. Crane Co. will evaluate wells and prepare abandonment program. Crane Co. conducted a walk through with EPA using aerial photos dating back to the 1940's in an effort to identify wells that may be conduits and have not been properly abandoned.

Since last update in June 2005, Crane Co. has investigated COG well 2, located east of the facility. Contamination there has decreased to less than the regulatory action level; however, the well was abandoned because of its condition. Crane Co. finished an investigation of SunCor well 3D, a golf course irrigation well located in the northeastern portion of the plume. No TCE was detected and are currently evaluating results and will generate a report. Crane Co. is currently investigating COG well 10, located on McDowell west of Litchfield Road. May 2005 results showed the well became contaminated and was then taken offline.

Crane Co. is developing a site groundwater flow model incorporating all current data. Crane Co. is working with Goodyear Tire and Rubber Company to incorporate data from their efforts; EPA asked that both groundwater flow models match as much as possible. The first draft of the model was submitted in January 2005; the revised model was submitted in August 2005. Crane Co. recently received comments on the first revision and will work on a second revision to the model.

The biggest project for Crane Co. this year in relation to PGA-North completed a work plan for installing sentinel wells around the edges of the plume to better define the plume. Crane Co. hopes to have finished negotiations with EPA today (October 6) and will begin field work in November 2005. First wells will be two deep wells (monitoring wells) drilled onsite. Crane Co. is working with City of Goodyear engineering for city right-of-way access and traffic control permits for offsite wells. Mr. Mongrain presented an illustration of the plume and planned well

locations as agreed upon by the technical working group made up of City of Goodyear, ADEQ, EPA, and Crane Co. Within the next two and a half years, up to 30 subunit A and subunit C wells will be installed.

Mr. Mongrain described the objectives of a source area investigation for main dry wells as follows: further characterize the main dry wells areas as a source of TCE and potential source of perchlorate; characterize the equilibrium between TCE in soil vapor and TCE in groundwater; retrofit the soil vapor extraction (SVE) system; and install an in-situ reactive zone (IRZ) injection well to facilitate IRZ pilot studies and evaluate in-situ remedies for both TCE and perchlorate. Mr. Mongrain displayed a graphic illustrating the locations of the main dry wells to be investigated. The dry wells are approximately 15' deep and 3' around. Two injection wells and a series of monitoring wells (one upgradient) will be installed in the dry well area.

The time line for this characterization is as follows: baseline sampling: July and August 2005; second baseline sampling: mid August 2005; tracer study: September 2005; test memo on tracer study and baseline study to EPA: October 5, 2005; installation of injection wells: week of October 10; monitoring through December 2005; and report to regulatory agencies in February 2006.

Cynthia Parker with the City of Phoenix asked Mr. Mongrain if the in-situ treatment included the soil column above groundwater. Mr. Mongrain replied that the remedy is groundwater remedy. The injection wells will be screened at 110-120 feet where the watertable is at 98 feet.

Volatile organic compound (VOC) contaminant mass removal: Crane Co. has removed 327 pounds of VOC's, 99 of that was TCE and the rest was acetone and isopropanol.

Dr. Fred Scott asked Mr. Mongrain how long the SVE system was shut down. Mr. Mongrain replied that the system was shut down from 1998 through 2004. Dr. Scott asked why the system was shut down. Mr. Mongrain replied that there was a potential for dioxin emission with the thermal oxidation system. Ms. Aycock stated that the technology was outdated and EPA asked the Corps of Engineers to propose state of the art technology. It took a few years to test and get the equipment in place. Dr. Scott stated that it appeared that the SVE system at PGA-North was very similar if not identical to the system used at PGA-South. Ms. Aycock and Mr. Mongrain agreed that the systems are very similar. A member of the public stated that it was explained at a previous meeting that there was some concern with replicating Goodyear Tire and Rubber Company's treatment system at PGA-North because of flammable chemical constituents present in PGA-North and not present at PGA-South. Mr. Mongrain stated that a fire suppression system had been installed to address this concern.

Mr. David Day asked Mr. Mongrain what is the area of influence. Mr. Mongrain replied that there are nine wells, six screened between 20'-70' and three screened at 70'-90.'

Crane Co. conducted an indoor air quality study to determine if soil gas concentrations identified in 2003 were impacting buildings in the area. The American Conference for Industrial Hygienists standard for safe working place is 258 mg/m3. Final results of the air quality study were 100 times less than the standard.

Dr. Scott suggested that a flowchart be compiled to compare remediation at each of the PGA-North and PGA-South sites. Ms. Aycock explained that the sites are completely different sites with completely different problems. The contamination at PGA-North is 100 times greater than the contamination at PGA-South. Dr. Scott stated that you can use percentages to compare the two site cleanup efforts.

A member of the public asked if there had been any change or retraction to the northern boundary of the plume which six years ago was at the Thomas Road alignment. Mr. Mongrain stated that there had been no change. Mr. Mongrain stated that a SunCor well was retrofitted to be an extraction well because of the contamination up in that area and some of the contamination was being captured.

A representative of City of Avondale asked if Crane Co. was increasing efforts to get a handle on the migration of the plume which may close down wells in Avondale. Mr. Mongrain stated that Crane Co. is working with EPA and City of Goodyear to evaluate problems with supply wells. The groundwater investigation is aimed at addressing these problems. The City of Avondale representative asked Mr. Iwanski how many supply wells the City of Goodyear operates. Mr. Iwanski replied 13. The City of Avondale representative asked how many had been shut down this year. Mr. Iwanski replied that City of Goodyear lost COG well 10 in May 2005. The City of Avondale representative stated that Avondale has no desired to be in the same situation City of Goodyear is in. City of Avondale has a supply well near SunCor well 3B and would like to see more information on that portion of the investigation and how Crane Co. will use the information. Ms. Aycock stated that EPA is expecting the abandonment plan for all conduit wells sometime this year.

Mr. Day stated that he has talked to water management professionals who have characterized the PGA-North plume as out of control and it is very alarming. Ms. Aycock agreed and stated that now that the groundwater investigation work plan has been approved, the investigation is concentrating its efforts on the next step, which is putting groundwater monitoring wells in to determine concentrations at the leading edge of the plume and where it is going. The next extraction units will be installed in areas that are most affected at the center and leading edges of the plume. Mr. Day stated that the estimated edge of the plume in May 2004 was not much more than about a mile to a mile and a half from supply well TW1A and the plume in May 2004 was approximately 2 to 2.5 times larger than that estimated in October 1999. Ms. Aycock stated that they are hoping to get some extraction wells up in that area rather than letting it continue on into the area. It is not possible to fully identify the edge of the plume until we get the wells installed; thus, we cannot say that we have captured the plume for another year or two.

6. The CAG took a 10 minute break

7. Call to the Public

Dr. Fred Scott asked Mr. David Iwanski, Water Resources Manager for the City of Goodyear, about the litigation and negotiations with Crane Co.

8. Work Session: Development and Dissemination of Outreach Materials – who, what, when, where, and why

The CAG decided to postpone the work session until the next meeting.

9. Next Meeting Date and Agenda Discussion

The next meeting is tentatively scheduled for October 19, 2005. The CAG proposed dedicating the entire meeting to the work session in which they will explore the development and dissemination of outreach materials.

10. Adjournment

Thomas H. Jones, Jr., CAG Co-Chair, adjourned the meeting.